



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,404	01/16/2004	Gagan Puranik	SKY03012	7481
25537	7590	11/05/2007		
VERIZON PATENT MANAGEMENT GROUP 1515 N. COURTHOUSE ROAD SUITE 500 ARLINGTON, VA 22201-2909			EXAMINER TAYLOR, BARRY W	
			ART UNIT 2617	PAPER NUMBER
			NOTIFICATION DATE 11/05/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

## Office Action Summary

Application No.

10/759,404

Applicant(s)

PURANIK ET AL.

Examiner

Barry W. Taylor

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-7, 9-12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-7, 9-12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1-2, 4-7, 9-12, 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al (2005/0227709 hereinafter Chang) in view of Diggelen (2004/0117114).

Regarding claim 6. Chang teaches a system for transmitting assistance location information to a plurality of telemetry devices over a two-way wireless network (tile, abstract), the system comprising:

a location server configured to generate the assistance location information from a location reference network within the wireless network (see figure 1 wherein location

server 170 used to provide telemetry device 160 location information obtained from a reference network 130 and 110 figure 2); and

a message server configured to broadcast the assistance location information to the plurality of telemetry devices over the wireless network (see message server "A-GPS Server" item 140 in figure 1 used to broadcast location information to telemetry device 160);

wherein the telemetry devices are configured to determine respective locations of the telemetry devices independently from the location reference network when out of coverage of the wireless network (see paragraphs 0015, 0028, 0032-0033, 0035 – 0038, 0041 wherein Chang discloses that server can calculate position of mobile device or the mobile device may itself calculate its position).

Chang does not use schedule.

Diggelen teaches a method and apparatus for using long-term satellite tracking data in a remote receiver (title, abstract). Diggelen teaches a server (102 figure 1) is used to schedule a transmission of new satellite tracking data to a remote receiver during a low traffic period (paragraphs 0010 – 0012, 0024, 0026 - 0028) to minimize the number of transactions between the receiver and the server thereby extending the operation outside of the service area of the network (paragraph 0012). Diggelen teaches the receiver can manually request satellite tracking data from the server (paragraph 0036) or the server can schedule a transmission of new satellite tracking data to the remote receiver during a low traffic period (paragraphs 0040 – 0042) thereby providing assisted GPS information to remote receivers without having the remote

receivers make the request for satellite tracking data thereby saving on system resources since the number of server transactions is minimized.

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the A-GPS server as taught by Chang to incorporate the broad cast schedule as taught by Diggelen thereby saving on system resources by not requiring the remote receivers to request for new satellite tracking data when they roam outside of the service area as taught by Diggelen (paragraphs 0012).

Regarding claim 7. Chang teaches an Assisted-Global Positioning System (See "A-GPS Server" item 140 in figure 1).

Regarding claim 9. Change teaches server receives request for location information (abstract, paragraphs 0007, 0010 – 0012, 0014 – 0015, see well known point-to-point position service in paragraph 0022, 0026, 0028 – 0038, 0041).

Regarding claim 10. Change teaches telemetry devices are within a common zone among a plurality of zones within the wireless network (see 110 figure 1 and expanded view in figure 2 wherein plurality of zones are shown).

Method claims 1, 2, 4 and 5 are rejected for the same reasons as apparatus claims 6, 7, 9 and 10 since the recited apparatus would perform the claimed method steps.

Program claims 11, 12, 14 and 15 are rejected for the same reasons as apparatus and method claims 1-2, 4-7 and 9-10 since the recited apparatus and method would perform the claimed program steps.

Regarding claim 20. Chang teaches an apparatus for obtaining location information over a two way wireless network (title, abstract and figure 1), the apparatus comprising:

means for transmitting a request for assistance location information to a location server over the wireless network, wherein the location server generates the assistance location information from a location reference network within the wireless network (see figure 1 wherein location server 170 used to provide telemetry device 160 location information obtained from a reference network 130 and 110 figure 2);

means for receiving a response from the location server over a point-to-point channel of the wireless network, the response containing the location assistance information (see figure 1 wherein location server 170 used to provide telemetry device 160 location information obtained from a reference network 130 and 110 figure 2); and

Chang does not mention using periodic message broadcasting.

Diggelen teaches a method and apparatus for using long-term satellite tracking data in a remote receiver (title, abstract). Diggelen teaches a server (102 figure 1) is used to schedule a transmission of new satellite tracking data to a remote receiver during a low traffic period (paragraphs 0010 – 0012, 0024, 0026 - 0028) to minimize the number of transactions between the receiver and the server thereby extending the operation outside of the service area of the network (paragraph 0012). Diggelen teaches the receiver can manually request satellite tracking data from the server (paragraph 0036) or the server can schedule a transmission of new satellite tracking data to the remote receiver during a low traffic period (paragraphs 0040 – 0042) thereby

providing assisted GPS information to remote receivers without having the remote receivers make the request for satellite tracking data thereby saving on system resources since the number of server transactions is minimized.

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the A-GPS server as taught by Chang to incorporate the broad cast schedule as taught by Diggelen thereby saving on system resources by not requiring the remote receivers to request for new satellite tracking data when they roam outside of the service area as taught by Diggelen (paragraphs 0012).

Regarding claim 21. Chang teaches an Assisted-Global Positioning System (See "A-GPS Server" item 140 in figure 1).

Regarding claim 22. Chang teaches the apparatus can calculate the location itself (see paragraphs 0015, 0028, 0032-0033, 0035 – 0038, 0041 wherein Change discloses that server can calculate position of mobile device or the mobile device may itself calculate its position).

Regarding claims 23. Chang does not use schedule.

Diggelen teaches a method and apparatus for using long-term satellite tracking data in a remote receiver (title, abstract). Diggelen teaches a server (102 figure 1) is used to schedule a transmission of new satellite tracking data to a remote receiver during a low traffic period (paragraphs 0010 – 0012, 0024, 0026 - 0028) to minimize the number of transactions between the receiver and the server thereby extending the operation outside of the service area of the network (paragraph 0012). Diggelen teaches the receiver can manually request satellite tracking data from the server

(paragraph 0036) or the server can schedule a transmission of new satellite tracking data to the remote receiver during a low traffic period (paragraphs 0040 – 0042) thereby providing assisted GPS information to remote receivers without having the remote receivers make the request for satellite tracking data thereby saving on system resources since the number of server transactions is minimized.

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the A-GPS server as taught by Chang to incorporate the broad cast schedule as taught by Diggelen thereby saving on system resources by not requiring the remote receivers to request for new satellite tracking data when they roam outside of the service area as taught by Diggelen (paragraphs 0012).

Method claims 16-19 are rejected for the same reasons as apparatus claims 20-23 since the recited apparatus would perform the claimed method steps.

### ***Response to Arguments***

2. Applicant's arguments filed 8/13/2007 have been fully considered but they are not persuasive.

a) Applicants generally argue that Chang requires the target mobile to initiate a request for data and generally point to paragraph 0045 of Chang (see bottom of page 2, paper dated 8/13/2007).

The Examiner respectfully disagrees. Applicants have misread Chang because paragraph 30 clearly discloses that aiding data (i.e. assistance location information) are generated **without** any request by a requesting entity (such as the mobile station) because every mobile station in the same service area can use the aiding data applicable



to that service area. In other words, Chang teaches the aiding data is updated at predetermined rates (see TABLES 1 wherein the aiding data is updated every 12 minutes for Enterprise Applications and can vary from 12 minutes up to 1Hr for Commercial Applications as shown in TABLE 2). It would follow that the server would then make the aiding data available to each serving area at that time which alone would read on Applicants "according to a schedule" limitation appearing in the independent claims because Applicants refuse to explain or define what is meant by "according to a schedule". The Examiner further notes that Chang indeed hints at differential GPS data (see "DGPS correction" in paragraph 23), which is extremely old and well-known method for fleet management systems to provide real time corrections, which improves GPS location determinations.

Since Chang does not use the term "schedule" the Examiner provided Diggelen who also allows requests to be made by the mobile stations, as well as, "schedule" broadcasts from the server (see for example paragraphs 0036 and 0040 - 0041 wherein the server automatically sends tracking data according to a schedule).

b) Next, Applicants attack Diggelen (see page 3, paper dated 8/13/2007) wherein Applicants generally argue that Diggelen invention relates to long term verses the instant application uses finite period then generally point to Applicants specification paragraphs 0048, 0032, 0046 and 0056.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "is stored for a finite period of time and made available for use by scheduled data

acquisitions, data acquisitions on demand, and data acquisitions associated with alerts”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, Applicants paragraph 0048 deals with some sort of data log and has nothing to do with “broadcasting, according to a schedule, the assistance location information to the plurality of telemetry devices over the wireless network” as generally recited in independent claims. Applicants paragraph 0032 requires the mobile to request assistance data because the ephemeris data is no longer valid. Applicants paragraph 0046 mentions the assistance can include differential GPS to enhance location accuracy, which is already taught by Chang (see section a listed directly above). Applicants paragraph 0056 mentions that the mobile request assistance and the server can “periodically broadcast” which is also taught by Chang (see section a listed above wherein teaches rates can be 12 minutes up to 1 hour (i.e. periodic)).

### ***Conclusion***

**3. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

---(2002/0196181) Fall teaches fleet management systems teach the ability to receive Differential GPS corrections in real time via a network connection to provide error compensation (i.e. assistance location information) and improve GPS position determinations.

---(6,901,260) Xin teaches differential GPS correction may be calculated periodically at a base station (e.g., once every second, once every few seconds, etc.) and transmit to any or all-mobile stations to provide highly accurate location information.

---(2002/0183070) Bloebaum et al teaches server may transmit GPS satellite signal information to specific mobiles, in response to a request for assistance.

Alternately or in additionally, the GPS satellite signal information server may periodically broadcast satellite signal information to all mobiles in a given coverage area.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost, can be reached at (571) 272-7872. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

Art Unit: 2617

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Centralized Delivery Policy:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number (571-273-8300).

Barry W. Taylor  
Art Unit 2617

 10/18/07  
BARRY TAYLOR  
PRIMARY EXAMINER